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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,076	11/18/2003	Brian S. Appel	12833-011USU1	6999
21918 7590 04/16/2010 DOWNS RACHLIN MARTIN PLLC			EXAMINER	
199 MAIN STR	_	NGUYEN, TAM M		
P O BOX 190 BURLINGTON	I, VT 05402-0190		ART UNIT	PAPER NUMBER
			1797	
			NOTIFICATION DATE	DELIVERY MODE
			04/16/2010	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patip@drm.com

	Application No.	Applicant(s)				
	10/717,076	APPEL ET AL.				
Office Action Summary	Examiner	Art Unit				
	TAM M. NGUYEN	1797				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 Ma	arch 2010					
	action is non-final.					
·=						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-19,21,26,30,40-42,75-82,84-105,108-119,121 and 123-125</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19, 21, 26, 30, 40-42, 75-82, 84-105,108-119, 121, and 123-125</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1.☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1/19/10; 12/28/09; 10/16/09</u> .	6) Other:					

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 15, 2010 has been entered.

It is reminded that the claims 48, 120, and 122 are withdrawn from consideration because the claims are non-elective claims.

## Claim Objections

Claim 121 is objected to because it dependents on itself. Appropriate correction is required.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

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ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 26, 30, 75-82, 84-86, and 105 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 6-8, 23, and 24-29 of U.S. Patent No. 7,301,060. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims draw to a process for converting animal waste to useful products. The Patent claimed set does not specifically claim that the animal waste comprises animal manure. It would have been obvious to one of skill in the art at the time the invention was made to have modified the process of the Patent claimed set by utilizing an animal waste containing animal manure because the claimed set include many different wastes including animal waste and leaves. It would be expected that an animal waste comprising animal manure would be successfully treated in the process of the Patent claimed set.

The patent claimed set does not claim a pre-heating step.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the patent claimed set by pre-heating the feedstock to the reaction conditions for effectiveness.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-19, 21, 26, 30, 40-42, 75-82, 84-105,108-119, 121, and 123-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (US 4,094,740)

Lang discloses a process for convert a solid municipal waste feedstock (e.g., animal waste) to a liquid fuel by preparing a slurry stream from the feedstock. The slurry stream is then passed to a reaction zone (e.g., hydrolysis) to provide a solid product, liquid product, and water. The liquid product is further process to produce liquid fuel. Since the reaction zone is operated under hydrolysis, it would be expected the pressure in the reaction zone is at least at the saturation pressure of water. It is noted that Lang does not specifically disclose that the product

include oil. However, the product from the hydrolysis would include at least a small amount of oil. (See abstract; the Figure; col. 1, lines 30 through col. 3, line 56)

Lang does not disclose a step of pre-heating the feedstock at a pressure above the saturation pressure of water in the slurry.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by heating the feedstock as claimed because it would be expected that heating the feedstock to the reaction conditions would improve the effectiveness of the process. Consequently, it would be effective to utilize a pressure above the saturation pressure of water because the reaction is under hydrolysis.

Lang does not specifically disclose that the animal waste comprises animal offal, turkey offal, or animal manure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by utilizing a waste comprising animal offal, turkey offal, or animal manure because Lang teaches that the waste comprises animal (meat and fat) and cabbage leaves. It would be expected that a waste comprising animal offal, turkey offal, or animal manure would successfully treated in the process of Lang because of the similarities between the feedstock.

Lang does not teach the operating temperatures ( $150^{\circ}$  C -  $400^{\circ}$  C) and pressures as claimed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by utilizing an operating temperature

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and pressure because it is within the level of one of skill in the art to utilize any effective condition resulting in hydrolysis including the claimed conditions.

Lang does not specifically teach that the liquid product is converted to hydrocarbon oils.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Lang by converting the liquid product to hydrocarbon oils as claimed because it is within the level of one of skill in the art to convert the liquid product to any liquid fuel including hydrocarbon oil and fuel gas.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAM M. NGUYEN whose telephone number is (571)272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tn /Tam M. Nguyen/ Primary Examiner, Art Unit 1797